

**SPECIFICATIONS OF 3 WHEELER AUTO MOUNTED GASJET 500 LITERS CAPACITY****GENERAL: -**

The 3 wheeler Auto chassis mounted water jetting machine is design to use high pressure water sets to remove obstruction, soluble grease, sludge, sediment and other material from line capacity of 50 mm – 200 mm.

**OPERATING MECHANISM:-**

The high velocity Water Jetting Machine is positioned directly above the manhole. The hose equipped with self-propelled nozzle is then inserted into the manhole. As the water at high pressure flows through the nozzle, forward jet of the nozzle breaks open the line blockage, the rear jet of the nozzle propels it and the hose moves forward breaking silt formation. In matter of few minutes the nozzle reaches next manhole. The light material is flushed down the line and the remaining material is pushed backwards.

The Unit shall consist of

- a. Prime Mover: -
- b. Pump
- c. Hose reel drum & hose
- d. Trolley
- e. Control

**a. PRIME MOVER: -**

The prime mover of the unit shall be lightweight 11 hp petrol engine w/low oil shut off having modern compact design.

**b. PUMP:-**

The high pressure pump shall be imported positive displacement, retroacting plunger triplex pump and having a discharge capacity of 4 gpm, (15 lpm) and 3000 psi (205 bar) pressure to perform the jetting function with a high degree efficiency and reliability. The pump shall have vibra-pulse feature to help the hose slide around high bends & propel itself in the pipeline. The pump shall have provisions for inducing large pulses in the fine through pulse actuating valve, which cuts out the operating cylinders through a lever action. The pumping unit shall be provided with unloader valve.

The suction of the pump shall be connected to the tank by a flexible hose and suction ball valve.

The pump shall be directly coupled to engine.

**c. HOSE REEL DRUM AND HOSE:-**

The hose reel drum shall be of sturdy and design to take a minimum of 300 ft of Ø 1/4" hose. The hose reel drum shall be driven manually to effect the wind and unwind operations. The unit shall be supplied with nozzle set of.

- (i) 15 deg. Angle Nozzle
- (ii) 15 deg. Angle Nozzle with forward jet
- (iii) 40 deg. Angle Nozzle
- (iv) Spring Leader Nozzle

The unit shall be provided with 200 ft of 1/4" dia-high pressure thermo plastic lightweight flexible hose with nylon braid in a detachable hose reel. The hose shall be provided with NPT male fittings.

**d. TROLLEY:-**

A steel frame on which the pump engine and hose reel is to be mounted shall be of welded steel construction with steel tubes. The overall dimension of the machine shall be as given below.

Overall length 650 mm  
Overall width 720 mm  
Overall height 1070 mm

The trolley shall be supported on two pneumatic tires for easy movement of the machine to nearby places.

**e. SPRAY WAND:**

A spray wand including dual lance wand with 25<sup>0</sup> & 40<sup>0</sup> nozzles, triggers and 40 feet high pressure hose shall be provided for high pressure washing & cleaning application.

**f. CONTROL:-**

The control features like ON/OFF switch choke and throttle controls, easy access for oil filling and dipstick shall be provided along with unit. A pressure gauge shall be provided for monitoring the high pressure jetting operation.

**g. AUTO CHASSIS:**

The above equipment shall be mounted on 3 wheeler diesel Auto chassis of 1000 kg GVW, like Piaggio / Bajaj or equivalent. Bidder shall furnish full details of vehicle chassis. Bidder shall also make arrangement to procure the vehicle with cabin from the manufacturer on behalf of client. The client will make direct payment to chassis manufacturer against their Profoma Invoice to avail the Govt. rates. The standard tools accessories and spares supplied with the chassis shall be handed over to the client at the time of delivery of the unit.

The bidder shall make arrangements for mounting equipment on the chassis accordingly to the rules laid down by the Regional Transport Office, and loads recommended by the chassis manufacturer on the front and rear axles.

The entire unit shall be housed in a housing fabricated from M.S square pipe/M.S angle and covered with 18 gauge aluminum sheet. The housing shall have a hinged rear door and one side door.

**h. TANK: -**

The water tank shall be vertical cylindrical in shape made of High Density Polyethylene of 500 lit. capacity. It shall be firmly mounted on the Auto chassis. The suction of the pump shall be connected to the tank by 12 mm dia pipes. The tank shall be provided with water level indicator.

**TRAINING: -**

The successful bidder shall arrange at his own cost to train client's operators for operating and maintaining the unit. The training period shall be 2 days.

**TESTING AND INSPECTION:-**

- (i) Tests on equipment at manufacturer's premises as required will be carried out in accordance with the manufacturer standard. All inspection, examination and testing shall be carried out in presence of the Engineer's representative in accordance with the specification.
- (ii) If the Engineer's Representative witnesses a test he shall be given a copy of the test results and certificates, upon request.